

Docket Number: 1085-043-PWH
Application No. 10/089.839
Amendment B

Listing of Claims:

Claims 1 – 32 (canceled)

33. (previously presented) A fan having a frame manufactured from plastic material and incorporating an external rotor brushless DC motor, the motor comprising:

a stator assembly base having a base plate;

the stator assembly base being manufactured from a thermally conductive material;

a winding assembly affixed to the stator assembly base;

circuitry associated with the motor, wherein the base plate is disposed between the circuitry and the winding assembly and has a side wall depending away from the winding assembly, the side wall being within an air flow generated, in use, by the fan and comprising part of a heat transfer path to dissipate heat away from the motor; and

the circuitry having heat generating components, wherein at least one of the heat generating components is mounted on a printed circuit board and overhangs an edge of the printed circuit board and attaches directly to the base plate hence conducting heat away from the overhanging component into the base plate.

34. (previously presented) A fan according to Claim 33, wherein the circuitry is attached to or supported by the base plate.

35. (canceled)

36. (previously presented) A fan according to Claim 33, wherein the side wall defines a recess within which the circuitry is located.

37. (previously presented) A fan according to Claim 33, wherein the base plate is provided with a cover, the circuitry being located between the base plate and the cover.

38. (previously presented) A fan according to Claim 33, wherein the circuitry is housed within an enclosure.

39. (previously presented) A fan according to Claim 38, wherein the enclosure is hermetically sealed.

40. (previously presented) A fan according to Claim 33, wherein the stator assembly base includes means for supporting the winding assembly.

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41. (previously presented) A fan according to Claim 33, wherein the circuitry includes a plurality of components mounted on the printed circuit board, and wherein the printed circuit board has a surface that is adjacent to the base plate.

42. (previously presented) A fan according to Claim 41, wherein at least some of the components on the printed circuit board are positioned on the opposite surface of the printed circuit board to that adjacent the base plate.

43. (previously presented) A fan according to Claim 41, wherein at least some of the components on the printed circuit board are positioned on the surface of the printed circuit board adjacent the base plate.

44. (previously presented) A fan according to Claim 41, wherein the components are positioned on both surfaces of the printed circuit board.

45. (canceled)

46. (previously presented) A fan having a frame manufactured from plastic material and incorporating an external rotor brushless DC motor, the motor comprising:

a stator assembly base having a base plate;

the stator assembly base being manufactured from a thermally conductive material;

a winding assembly affixed to the stator assembly base;

circuitry associated with the motor, wherein the base plate is disposed between the circuitry and the winding assembly and has a side wall depending away from the winding assembly, the side wall being within an air flow generated, in use, by the fan and comprising part of a heat transfer path to dissipate heat away from the motor; and

the circuitry having heat generating components, wherein at least one of the heat generating components is located proximal an aperture in a printed circuit board, a projection from the base plate contacting the at least one component through the aperture to conduct heat away from the contacted component into the base plate.

47. (previously presented) A fan according to Claim 33, wherein the winding assembly comprises a number of multipole stator laminations with windings.

48. (previously presented) A fan according to Claim 33, wherein the motor has a cover plate and the cover plate comprises a part of the fan housing.

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49. (previously presented) A fan according to any Claim 33, wherein the stator assembly base is manufactured from aluminum.

50. (canceled)

51. (previously presented) A fan according to Claim 46, wherein the printed circuit board is attached to or supported by the base plate.

52. (previously presented) A fan according to Claim 46, wherein the side wall defines a recess within which the circuitry is located.

53. (previously presented) A fan according to Claim 46, wherein the base plate is provided with a cover, the circuitry being located between the base plate and the cover.

54. (previously presented) A fan according to Claim 46, wherein the circuitry is housed within an enclosure.

55. (previously presented) A fan according to Claim 54, wherein the enclosure is hermetically sealed.

56. (previously presented) A fan according to Claim 46, wherein the stator assembly base includes means for supporting the winding assembly.

57. (previously presented) A fan according to Claim 46, wherein the circuitry includes a plurality of components mounted on the printed circuit board, and wherein the printed circuit board has a surface that is adjacent to the base plate

58. (previously presented) A fan according to Claim 57, wherein at least some of the components on the printed circuit board are positioned on the opposite surface of the printed circuit board to that adjacent the base plate.

59. (previously presented) A fan according to Claim 57, wherein at least some of the components on the printed circuit board are positioned on the surface of the printed circuit board adjacent the base plate.

60. (previously presented) A fan according to Claim 57, wherein the components are positioned on both surfaces of the printed circuit board.

61. (previously presented) A fan according to Claim 46, wherein the winding assembly comprises a number of multipole stator laminations with windings.

62. (previously presented) A fan according to Claim 46, wherein the motor has a cover plate and the cover plate comprises a part of the fan housing.

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63. (previously presented) A fan according to Claim 46, wherein the stator assembly base is manufactured from aluminum.